PROJECT USER'S MANUAL

Multimedia Enforcement Division (2248-A)
Office of Regulatory Enforcement
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460

September 1999

THIS MANUAL IS RELEASABLE IN ITS ENTIRETY

ACKNOWLEDGMENTS

MAILING LIST ADDITION

If you would like to receive updated materials, and you work for a federal, state or local government environmental agency, please e-mail your name, government mailing address, and government phone number to benabel@indecon.com. If you have any questions about updates, contact the EPA enforcement economics toll-free helpline at 888-ECON-SPT (326-6778).

If you are a member of the public and would like to obtain these materials, download them from the U.S. EPA's web site at http://es.epa.gov/oeca. (This address may have changed by the time you read this manual. To obtain the current address, you can call the helpline at 888-ECONSPT.)

September 1999

TABLE OF CONTENTS

A.   OVERVIEW

In some environmental enforcement cases, the violator may be allowed to perform a Supplemental Environmental Project (SEP) as part of a settlement of the case. EPA defines SEP's as environmentally beneficial projects that a violator undertakes — but is not otherwise legally required to perform — in exchange for favorable penalty consideration in settlement of an enforcement action.[1] The PROJECT computer model assists EPA staff in determining the actual cost of such projects.[2] PROJECT can also calculate the value of injunctive relief. Generally PROJECT is appropriate for settlement purposes but not trials or administrative hearings. See EPA's SEP policy (Appendix B) for more context.

The actual "true" cost of a SEP to a violator is the after-tax net present value of the project. Net present value is the cost of the project in today's dollars. The concept of present value accounts for the "time value of money": a dollar today is worth more than a dollar one year from now because of investment possibilities. The time value of money is quantified by "discounting" future costs to determine their present value using a discount rate that reflects the violator's cost of money for investments. For this reason, project costs occurring in future years will have a lower net present value in today's dollars. Furthermore, the after-tax net present value will be even lower if the costs

---

[1] See Appendix B, memorandum from Steven A. Herman, "Issuance of Final Supplemental Environmental Projects Policy," dated April 10, 1998, for details on acceptable projects and other SEP policy issues.

[2] For "early compliance" SEP's, use the BEN model instead of PROJECT. As a form of SEP, a defendant may offer to comply with an environmental regulation significantly earlier than is required. Just like other SEP's, this action has associated with it an after-tax net present value that is the maximum amount by which you can reduce the proposed civil penalty. For the "compliance date" in the BEN model, enter the date when the regulation requires compliance of the defendant (i.e., the date by which you would normally expect the defendant to achieve compliance). For BEN's "noncompliance date," enter the date that the defendant is proposing for its early compliance (i.e., a date earlier than the noncompliance date you previously entered). BEN's "economic benefit" result is the maximum amount by which you should mitigate the proposed civil penalty.

of the project are deductible from the violator's taxes, since the project is creating tax savings for the violator.

PROJECT first calculates the present value as of the project operation date, and then determines the final value as of the penalty payment date. Project cost components include capital investments and one-time nondepreciable expenditures required to install capital equipment or conduct other activities (e.g., remove contaminated sediments from a stream), as well as annually recurring costs (for operation and maintenance of capital equipment or for other purposes).[3]

PROJECT is easy to use, and designed for people without any background in financial economics.[4] To calculate the present value of a SEP, you must supply the case name, EPA Region, analyst name, tax status, state, penalty payment date, run name, estimated project costs, and project operation date. For the remaining variables (tax, inflation, and discount rates, tax deductibility of one-time nondepreciable expenditures, and number of credited years for annual cost), you can either accept the model's standard values or specify your own.

This *PROJECT User's Manual* contains all the information a user needs to run the model, as well as descriptions of the underlying formulae. This manual is designed to help you determine the appropriate input data for PROJECT, enter such data correctly, and understand the results. Appendix A provides a detailed explanation of PROJECT's computational methods, but you do not have to be familiar with Appendix A to use PROJECT or this manual.

B.   HOW TO USE THE MANUAL

This manual provides instructions for using PROJECT, taking you step-by-step through a PROJECT run. If you are already familiar with the BEN model, you will notice that the models operate similarly, with many of the same data requirements.

Chapter 2 describes how to use PROJECT. Chapter 3 defines each of the inputs you will need to run the model. Appendix A provides detailed explanations of PROJECT's calculations. Appendix B is a copy of EPA's SEP policy.

---

[3]   PROJECT considers and calculates only the direct financial costs (or savings) associated with implementation of a SEP. PROJECT does not consider any changes in sales, market share, employee morale, or public image that may be associated with some SEP's. Such changes (if present) may have significant financial impacts for the violator, but they are often difficult to estimate and are outside the scope of this analysis.

[4]   The PROJECT model should provide reasonable estimates of the after-tax net present value for almost all SEP's. In some unusual cases, the model may not be appropriate or may need to be used in a modified manner. If you ever suspect that you might have such a case, consult with EPA's toll-free enforcement economics helpline (888-ECONSPT) for guidance.

Most of this information (except the appendices) is also in PROJECT's on-line help system, accessible through the F1 key from any screen within the model. If you need further assistance in operating the program or understanding the results, please contact the U.S. EPA enforcement economics toll-free helpline at 888-ECONSPT (326-6778) or benabel@indecon.com. If you need legal or policy guidance, please contact Jonathan Libber, the BEN/ABEL Coordinator at 202-564-6102, or e-mail him at libber. jonathan@epamail.epa.gov.

PROJECT is an interactive computer program that runs in the Windows™ operating environment. This chapter contains five sections. Section A describes the structure of the computer program. Section B explains the procedures for installing the program on your computer. Section C provides data format requirements and additional helpful hints for entering data at your computer, as well an overview of error messages. Section D tells you how to calculate and print results. Section E explains how to exit the program and save files. For an in-depth description of each variable and recommended sources of information, see Chapter 3.

A.   STRUCTURE OF THE COMPUTER PROGRAM

PROJECT consists of three different screens: main screen/case creation, run input, and results/output. In general, you start with the main screen, enter data on a separate screen, return to the main screen, then view (and print) your output from a final screen. PROJECT operates like EPA's BEN model and any standard Windows™ applications (although it differs significantly from EPA's ability to pay models of INDIPAY, MUNIPAY, and ABEL). Use the mouse or the Tab and Return keys to move between cells and within a screen. Hold down the Shift key while pressing Tab to return to previous entries.

When you first open PROJECT the case screen appears. PROJECT starts up with a blank case screen. You can obtain a new screen at any time by selecting "New" from the File menu, or using the Ctrl+N shortcut. To toggle between cases, select the appropriate file name under the "Window" menu.

The first inputs on the case screen are case name, analyst name, and office/agency. These values are for reference only and do not affect the results. Next PROJECT asks for the violator's tax status and state. With this information PROJECT references an internal database and automatically calculates the relevant marginal tax rate. After the tax rate PROJECT requests the penalty payment date.

The right side of the case screen is for run management. Here you can create a new run, enter or edit run data, copy a run, remove a run, and calculate a run. You can create multiple runs for each case.

The run screen is where you enter the cost components of the SEP. It is also where you have the opportunity to customize the discount and inflation rates, as well as other default values. You must enter all the cost data for a run before you can calculate the after-tax net present value of a SEP.

The output screen displays the results of PROJECT's calculation. Here you have three options. You can print out a summary of the PROJECT calculation, you can print out a detailed version of the calculation, and/or you can return to the run screen.

Once you are finished with a calculation, you can create, edit or calculate other runs. You can even create other case files, and toggle between them. Before you exit PROJECT it gives you the option of saving the current case, but you can also save your case file at anytime during your session. All runs are automatically saved with the case. The case is saved with a ".prj" extension in the folder you specify.

At any time during your use of the model you can access the help system by pressing the F1 key, just as in any Windows application.

B. PROGRAM INSTALLATION

PROJECT requires a personal computer running the Windows operating system (version 3.1 or higher). In addition, for optimal formatting of various data entry screens, set your display in the control panel to the "small fonts" option. ("Small fonts" is the Windows default, so unless your display settings have been altered, your computer should be set appropriately.)

The remainder of this section describes how to install PROJECT from EPA's website or from floppy disks, onto a local network or stand-alone PC. Installing PROJECT will automatically install the BEN model, since the models share some installation files. If you have trouble downloading or installing the model, consult your local computer technician.

PROJECT is located on the EPA website at http://es.epa.gov/oeca.[5] To install PROJECT, first download the installation file to your computer or network, then run the file and follow the steps listed below for installing it from a set of disks. The installation screens will appear as they do for installation from a disk, although you will not be prompted for a second disk.

If you have access to the installation disks, insert Disk 1 and run "a:\setup.exe" (or

---

[5] This address may have changed by the time you read this manual. To obtain the current address, you can call the helpline at 888-ECON-SPT.

"b:\setup.exe" if the floppy is in the b:\ drive). Then click **[OK].** If you receive a warning message that you cannot copy a file because it is in use, simply click **[OK]**. It is merely notifying you that the file the installation system is trying to copy already exists on your computer and is currently open.

     The first PROJECT setup screen will appear:
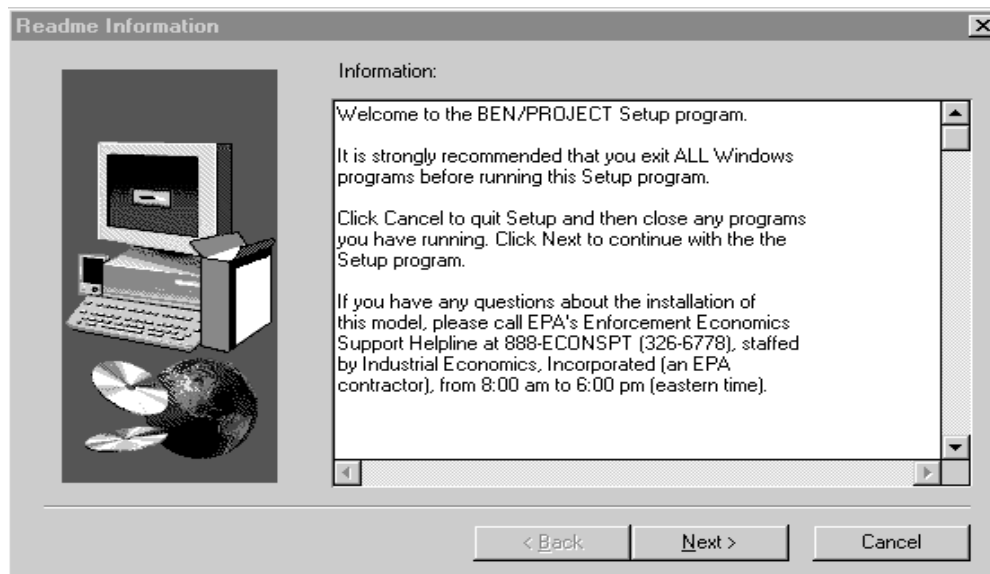
     You should close all other programs before installing the model. To do so, click on **[Cancel]**, close the programs and repeat the appropriate steps above. Otherwise click **[Next]** and proceed to the second screen as shown below:
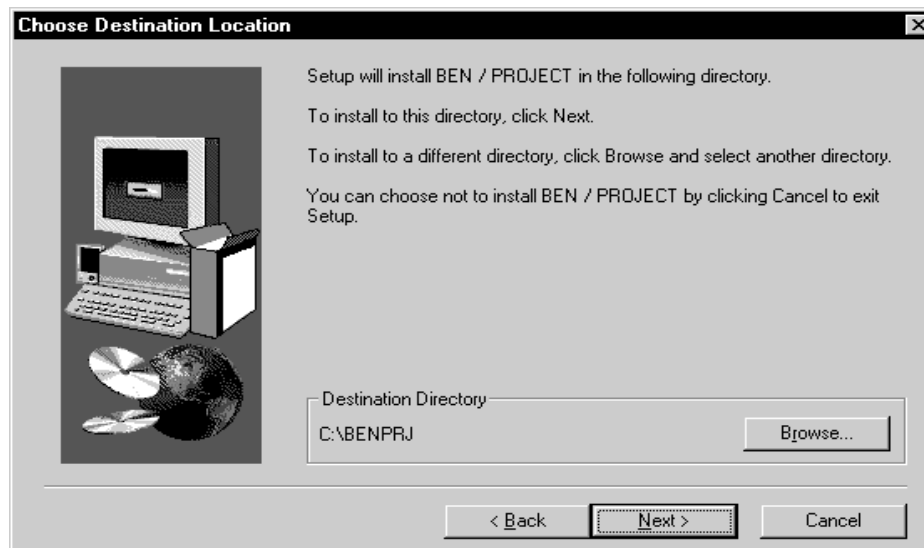
The second screen offers you the opportunity to designate a directory in which to store the model. The default directory is "c:\BENPRJ" (assuming that your local hard drive is c:\). If you wish to save the model to a different directory, press **[Browse]** and choose your desired directory. To proceed with the BEN/PROJECT installation, press **[Next]**. The next setup screen allows you to choose a program folder name as shown below:
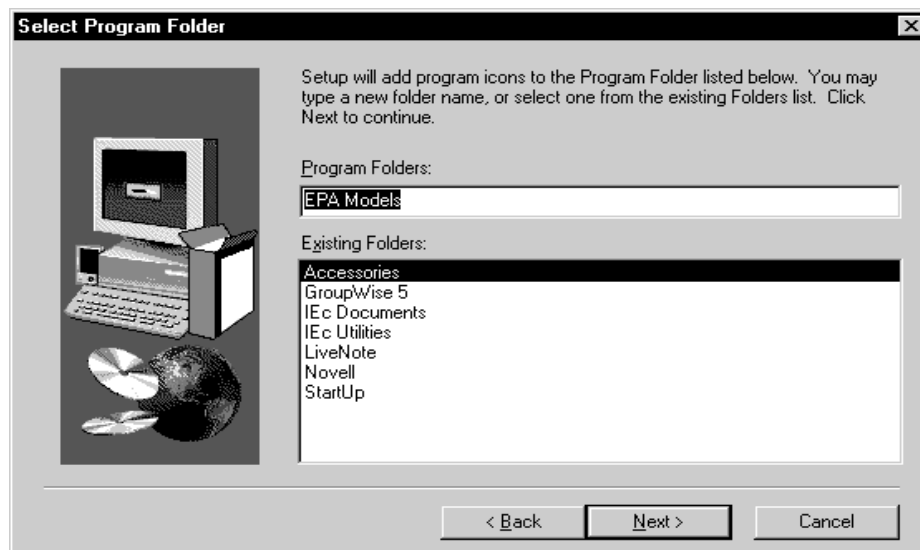
The default folder name is EPA Models, which you may alter. To continue installation press **[Next].** BEN/PROJECT will partially install and then prompt you for Disk 2, as shown below:

If the files are not on Disk 2 you may type their location or use browse to find them. Press **[OK]** when the path is correct. If the program is on two disks, simply insert Disk 2 and press **[OK]**. The setup program will create icons for BEN and PROJECT and finish installing them. When you have completed the installation process, you should reboot your computer prior to using the PROJECT model or any other software package.

Once PROJECT has been loaded onto your hard drive, simply double-click the model icon to start the program. If you are running Windows™ 95 or higher, and did not change the default directory and folder, BEN and PROJECT will automatically be listed on the start menu under programs in the "EPA Models" folder.

After installing the model, you may wish to create a subdirectory for storage of all your case files. Alternatively, you may also choose to save your case files in any pre-existing directories corresponding to different cases or projects

C.   DATA ENTRY

Like other Windows™-based programs PROJECT uses the mouse or the Enter and Tab keys to move from entry to entry or from screen to screen. Hold down the Shift key while pressing Tab to return to previous entries. Each screen has several options and spaces for input.

PROJECT will accept several entry formats. Numerical values can include but do not require commas. Monetary values may include decimals but will be rounded to the nearest dollar. They may be entered with or without dollar signs. Rates or percentages should be entered as a decimal number without a percent symbol (e.g., enter 0.20 to represent 20 percent). If you type 2.5 for an inflation rate, PROJECT will read it as an inflation rate of 250 percent.

PROJECT converts all dates to a "1-Jan-1998" format, but can understand almost any sensible format. If you enter an atypical date format, be sure to check that PROJECT has interpreted it as you intended.

Be careful to use only number keys to enter numerical values. A frequent mistake is typing the lowercase letter **L** instead of a number **1**. Another error occurs when the letter **O** is typed instead of the number **0** (zero).

PROJECT will tell you if the format for the entry is incorrect.   If this happens correct the number and enter it again. Some inputs are limited to a range of values. If an entered value falls out of this range, PROJECT will display an error message with the allowable range of values. Other error messages will appear if you did not enter data in a required field.

You may enter variables on the same screen in any order. The only exception to this is that you must have entered all of the inputs for a case before you create a run. Therefore you will receive non-entry error messages only when moving from screen to screen or creating a run.

After typing your entry you might discover that you have typed an incorrect letter or number. Typing errors are easy to correct: simply return to the relevant value and type over the mistake. Like all computer programs, PROJECT follows the GIGO protocol: "Garbage In, Garbage Out." Verifying your data inputs is therefore extremely important.

D.   CALCULATING AND PRINTING RESULTS

To perform a net present value calculation, select the desired run title from the list on the main screen and press **[Calculate]**. If you have entered data for only one run, you will therefore have only one run to choose. If more than one run is on the list, you may calculate multiple runs and display the results simultaneously. To do this, first select multiple run titles (i.e., select a run and then click on subsequent desired runs, while simultaneously holding down the Control key), then press **[Calculate]**. Additional runs are useful when you are analyzing more than one proposed SEP, or if you want to compare the effects of changing variables. The following screen will display a summary of the results:

Example Case: Project Present Value Results	☒
Run Name =	Test Run
Present Values as of Project Operation Date:	01-Jan-2001
A) Capital & Other One-Time Costs	$81,098
B) Annually Recurring Costs	$2,566
C) Initial Project Value (A+B)	$83,664
D) Final Proj. Value at Penalty Payment Date,	
01-Jan-1999	**$68,007**
C-Corporation w/MA tax rate	
Discount Rate	10.9%
Capital Investment:	
Cost Estimate	$100,000
Estimate Date	01-Sep-1996
Inflation Rate	1.7%
One-Time, Nondepreciable Expenditure:	
Cost Estimate	$10,000
Estimate Date	01-Sep-1996
Inflation Rate	1.7%
Tax Deductible?	Y
Annual Costs:	
Cost Estimate	$1,000

Print: [Summary] [Detail]   [Done]

You may print either a summary or the detailed calculations for the results. The **[Summary]** button will print only the information from the results screen. The **[Detail]** option will print, separately for each run, a summary page, a page showing the present value calculations for capital and other one-time costs, and one or two pages showing the present value calculations for annually recurring costs.

For more information on interpreting these pages, consult Appendix A, or call EPA's toll-free enforcement economics support helpline at 888-ECONSPT (326-6778).

Although printing is done from the output screen, the printer setup is controlled by the pull-down menu on the main screen. The printer setup allows you to shift between landscape and portrait printing, as well as choose more advanced options.

E.   EXITING AND SAVING

You exit PROJECT just like any other standard Windows application. From the main screen, select Exit under the File pull-down menu at the top left corner of your screen, or click on the **[x]** button at the top right corner of your screen, or double-click on the PROJECT icon at the top left corner of your screen. PROJECT will ask you if you want to save your work before you exit.

Be sure to save your case(s) before you exit. You save a case by selecting "Save" under the File menu (or give the case a new name by selecting "Save As…"), or the Ctrl+S shortcut. PROJECT cases are automatically saved with the extension ".prj" and can be accessed using the "Open" command under the File menu or the Ctrl+O shortcut. You can save cases in any folder, and switch between different folders at any time. Runs are automatically saved as part of a case.

To calculate the after-tax net present value of supplemental environmental projects (SEP's), PROJECT requires the entity's tax status, state, penalty payment date, project cost estimates and dates, and project operation date. For the tax, inflation, and discount rates, you can either accept PROJECT's tailored default values or specify your own.

This chapter explains the variables in the order in which you enter them in PROJECT. The explanations include a brief description of the criteria you should use in developing the input values, and the basis for each of the standard values. Each explanation also contains a statement regarding how a change in the value of each variable will affect the PROJECT after-tax net present value result, as summarized below (holding all other variables constant).

Input Item	Direction of Change	Impact on Result
Entity Type	not-for-profit to c-corp. or other for-profit	decrease
Marginal Tax Rate	increase	decrease
Penalty Payment Date (PPD)	later	increase
Cost Estimates	increase	increase
Inflation Rates	increase	increase
Tax Deductibility of One-Time Nondepreciable Expenditure	tax-deductible to not tax-deductible	increase
Credited Years for Annual Costs	increase	increase
Project Operation Date (POD)	later	decrease
Discount Rate	increase	varies

A.   CASE SCREEN

The case screen shown below is what you see when you first open PROJECT. This is where you enter the following variables: case name, office/agency, analyst name, entity type, state, tax rate, penalty payment date, and run name. It is also where you add, edit, calculate and remove runs.

1.   Case Name, Office/Agency, Analyst Name

Case name, analyst name, and office/agency (formerly EPA region) are the first three inputs in PROJECT. They are for reference purposes only and do not affect the calculation. Each of them will appear along with the current date on the bottom of every page of the results.

a. Case Name

Case name is the first input in PROJECT. This name can be any length and can contain letters, spaces, punctuation and numbers (although you may not leave it blank). It will appear along with the current date, analyst name, and EPA region on each page of the results. Since its sole purpose is documentation, this label can contain anything you choose. It can reflect the violator's name, the name of a specific SEP, or a characteristic of the specific case (e.g., "Payment on July 15, 1999"). Each case can contain several runs, so you will not need to alter the case name to save individual calculations.

b. Office/Agency

Like case name, office/agency is for reference purposes only (although you may not leave it blank). It will appear along with the current date, case name, and analyst name on each page of the results. A pull down menu to the right of the cell lists all ten EPA regions, EPA headquarters, and the option of "other." You may also type in a different value.

c. Analyst Name

Like case name and office/agency, analyst name is for reference purposes only (although you may not leave it blank). This name can be of any length and can contain letters, spaces, punctuation and numbers. It will appear along with the current date, case name, and EPA region on each page of the results. It can be anything you choose, but it is most appropriate to simply enter your own name.

2. <u>Entity Type, State, Customized Tax Rate</u>

PROJECT needs to know the violator's tax rate to calculate the after-tax net present value of a SEP, since project costs are generally tax-deductible. Because tax-deductible expenses and depreciation associated with capital investments reduce taxable income, they result in tax savings. PROJECT uses the marginal tax rate to account for the tax effects of project costs. The higher the tax rate, the higher the tax savings, and therefore the lower the after-tax value of the SEP. Changing the violator's state or tax status changes the violator's marginal tax rate and thus alters the value of a proposed SEP.

a. Entity Type

PROJECT asks you to designate the tax filing status of the entity, either Not-For-Profit, C-Corporation, or For-Profit Other than C-Corporation. Choosing the correct tax status is critical,

because it determines PROJECTS's application of the tax rate and the discount rate. PROJECT will default to C-Corporation status.

A C-Corporation files a federal tax Form 1120 or Form 1120-A. These companies are taxed at corporate income tax rates. Virtually all publicly traded companies are C-Corporations, but small private firms can also be C-Corporations.

For-profit entities other than C-corporations may be S-corporations, partnerships, or sole proprietorships (e.g., a corner grocery store). These entities file federal tax returns other than 1120 or 1120-A (e.g., an S- corporation files a Form 1120-S and a Schedule K for each shareholder). The income and expenses of these organizations are divided among the shareholders and reported on their individual income tax returns. Income is therefore taxed at the individual income tax rate.

Not-for-profit entities, such as municipalities, public authorities, and charitable organizations, generally have a tax-exempt status. When you indicate that the violator is a not-for-profit entity, PROJECT sets the marginal income tax rate to zero. (Although rare, certain not-for-profit companies are subject to taxation. You should verify the status of the not-for-profit in question and adjust the tax rates accordingly.)

b.   State

This is the state in which the entity conducts the majority of its business, which is not necessarily the state in which it is incorporated. Selecting the correct state is important because PROJECT uses a state-specific tax rate in its calculations. The pull-down menu lists all fifty states plus "AVG", which is an average of all state tax rates (appropriate if the proposed SEP involves several states).

c.   Customized Tax Rate

After you have entered the tax status and state of the violator, PROJECT will automatically calculate the marginal combined tax rate. The marginal income tax rate is the fraction of the last dollar of taxable income that a defendant would pay to federal and state governments. PROJECT uses the marginal tax rate, not the average tax rate (i.e., total tax divided by total taxable income), because the marginal tax rate is the rate that applies to incremental changes in the violator's tax-deductible expenses.

State tax rates must be adjusted to reflect their deductibility from federal taxable income. The adjustment is made by multiplying the marginal state tax rate by a factor equal to one minus the marginal federal tax rate, as shown in the following formula:

Combined tax rate = Federal rate + [State rate x (1 - Federal rate)]

State income taxes do not include sales tax, inventory tax, charter tax, or taxes on property. One-time tax payments, such as taxes on the purchase of equipment, should be included in capital investments or in one-time nondepreciable expenditures. If the tax recurs regularly, then it should be included in annually recurring costs. For example, sales tax would be included in the capital cost while property tax would be included in annual cost.

If you have information that supports the use of tax rates other than those supplied by the PROJECT model (e.g., the entity was not subject to the highest marginal rate), you may modify the combined tax rate. To do so, simply select the tax rate and type over the standard value. Remember to enter the tax rate as a decimal. PROJECT will automatically convert it to a percentage.

When the tax rate has been modified, a note indicating the modification will appear in the PROJECT run results. Note that once tax rates are modified, re-designation of the state or entity type will result in a loss of the customized information.

PROJECT assumes that the expenses (including depreciation) of SEP's are deductible from a violator's income for tax purposes. If the violator asserts that the SEP costs are not tax deductible and underlineunderline{commits} in the settlement document not to deduct such costs, then the marginal tax rate may be set to zero. Further, for each tax year costs are incurred by defendant for the SEP, the violator's chief financial officer (or other official responsible for tax preparation) must submit a signed statement to the Agency certifying that the expenses were not deducted. The certification should state:

> "Under penalties of perjury, I declare that I have examined the tax return pertaining to the year XXXX. To the best of my knowledge and belief, these tax returns do not contain deductions or depreciation for any supplemental environmental project expenses my company has incurred."

The agreement to make this submission should be spelled out in the settlement document. The settlement should contain language that the defendant acknowledges that the settlement and certifications will be forwarded to the IRS. The litigation team should make the defendant aware that should the SEP costs be deducted, not only will the defendant be facing prosecution for perjury, but the Agency will seek the full penalty regardless of how much work was performed on the SEP. If you need further guidance on this issue, please contact Jonathan Libber of the Multimedia Enforcement Division at 202-564-6102 or e-mail him at libber.jonathan@epamail.epa.gov.

3. **Penalty Payment Date**

The penalty payment date is the date when the violator will make its actual payment to the government. If you vary the date of penalty payment, PROJECT automatically adjusts the SEP's present value by discounting the costs to the revised date. The present value of project costs will increase as the penalty payment date is pushed further into the future.

Dates may be entered as month/day/year (i.e. 7/31/98) or written out (i.e. July 31, 1998). PROJECT will accept two-digit years, but four-digit years are preferable. You must enter dates to the day. If you do not enter a day, PROJECT will assume the first of the month.

**4.   Creating/Adding, Copying, and Removing Runs**

You must create a run before you can enter SEP cost information. To add a new run, enter the run name under "New Run:" and press **[Add]**. PROJECT will save the new run and list it under "Existing Runs." Run names can be any length and include any letter, punctuation or number. Each case may contain multiple runs. Addtional runs are useful when analyzing the net present value of more than one SEP for a particular case, or if you want to compare the effects of changing variables.

To copy an existing run select the run you wish to copy from the list of existing runs and press **[Copy]**. A window will appear asking you to enter a name for the new run. No two runs can have the same name. Enter the new name and press **[OK]** to save the new run or **[Cancel]** to delete it. The copy will contain all of the information from the original. Copies are particularly useful when making only minor changes in cost information from run to run, because they can be used to carry over consistent data.

To remove a run select it from the existing run window and press **[Remove]**. A window will appear asking you if you are sure. Press **[Yes]** and the run is deleted. Remember that PROJECT does not have a "trash bin" to hold deleted runs, so you will have no way to retrieve a run once you have removed it.

B.   RUN INPUT SCREEN

To access the run input screen, select a run and press **[Enter/Edit],** or simply double click on the run name. Here you enter cost estimates for the SEP's three possible components: capital investments, one-time nondepreciable expenditures and annually recurring costs. Each cost component requires a cost estimate and an estimate date, with the additional option of overriding the default inflation rate. In addition, you can override the assumption that the one-time nondepreciable expenditure is tax deductible, as well as change the default assumption of five years of credited annually recurring costs. At the bottom of the run screen you must enter the project operation date and may alter the default discount rate. The run screen is shown on the next page.

```
┌─ Example Case: Test Run ──────────────────── [X] ┐
│ ┌─ Project Components ──────────────────────────┐ │
│ │ ┌─ Capital Investment ──────────────────────┐ │ │
│ │ │  Cost Estimate   Estimate Date   Inflation Rate │ │ │
│ │ │ ┌──────────┐ ┌───────────┐ ┌────────┐ │ │ │
│ │ │ │$100,000  │ │01-Sep-1996│ │1.7%    │ │ │ │
│ │ │ └──────────┘ └───────────┘ └────────┘ │ │ │
│ │ └───────────────────────────────────────────┘ │ │
│ │                                               │ │
│ │ ┌─ One-Time, Nondepreciable Expenditure ────┐ │ │
│ │ │  Cost Estimate   Estimate Date   Inflation Rate │ │ │
│ │ │ ┌──────────┐ ┌───────────┐ ┌────────┐ │ │ │
│ │ │ │$10,000   │ │01-Sep-1996│ │1.7%    │ │ │ │
│ │ │ └──────────┘ └───────────┘ └────────┘ │ │ │
│ │ │  ☑ Tax Deductible                         │ │ │
│ │ └───────────────────────────────────────────┘ │ │
│ │                                               │ │
│ │ ┌─ Annually Recurring ──────────────────────┐ │ │
│ │ │  Cost Estimate   Estimate Date   Inflation Rate │ │ │
│ │ │ ┌──────────┐ ┌───────────┐ ┌────────┐ │ │ │
│ │ │ │$1,000    │ │01-Sep-1996│ │1.7%    │ │ │ │
│ │ │ └──────────┘ └───────────┘ └────────┘ │ │ │
│ │ │  Number of Credited Years: ┌───────┐     │ │ │
│ │ │                            │5      │     │ │ │
│ │ │                            └───────┘     │ │ │
│ │ └───────────────────────────────────────────┘ │ │
│ └───────────────────────────────────────────────┘ │
│                                                     │
│  Project Operation Date: ┌───────────┐             │
│                          │01-Jan-2001│             │
│                          └───────────┘             │
│            Discount Rate: ┌───────┐                │
│                           │10.9%  │                │
│                           └───────┘                │
│                   ┌────────┐   ┌────────┐          │
│                   │   OK   │   │ Cancel │          │
│                   └────────┘   └────────┘          │
└─────────────────────────────────────────────────────┘
```

1.   Cost Estimate Dates

Each cost estimate needs a date. This is the date on which the estimate of the SEP cost is based. Dates may be entered as month/day/year (i.e., 7/31/98) or written out (i.e., July 31, 1998). PROJECT will accept two-digit years, but four-digit years are preferable. You must enter dates to the day. If you do not have date information to the day, use the day that falls in the middle of the time frame you have. For example, if all you know is that the estimate was made in May of 1998, use May 15, 1998 as the estimate date. If all you know is that the estimate was made in 1998, use July 1, 1998 as the estimate date. If you do not enter a day, PROJECT will assume the first day of the month. If you have costs with different dollar-years, enter them as separate runs, and sum the separate runs' results.

2.   Inflation Rate

The inflation rate in PROJECT is the annual rate at which the costs of environmental control projects are expected to increase over time. These cost increases are the result of various factors affecting supply and demand for particular products and services, as well as general inflationary pressures in the economy. PROJECT uses this rate to adjust the cost of SEP's from the cost estimate date to the project operation date. The higher the inflation rate, the higher the value of the SEP will be at the project operation date.

PROJECT's inflation rate is based on the "Plant Cost Index" (PCI) published in *Chemical Engineering* magazine. The PCI is used rather than another index (e.g., the Consumer Price Index, or the GDP Implicit Price Deflator), because it more accurately reflects the costs of activities associated with pollution-control expenditures. The PCI is based on cost changes in typical components of pollution control, including equipment, construction labor, buildings, and engineering and supervision.

To calculate future inflation, PROJECT extrapolates the PCI forward in time at a forecasted rate based upon a consensus forecast for the Consumer Price Index (CPI) and the PCI's historical relationship to the CPI. (The rationale for the calibration of the PCI to the CPI is that the CPI — yet not the PCI — has widely available forecasts for projected inflation.)

The inflation rate for each SEP cost category may be modified individually because the different cost categories may be affected by different inflationary trends. If you have some reason to believe that a better inflation forecast for your purposes is available, or if you would like to obtain the detailed calculations for this projected rate (which is updated each year), please call EPA's helpline at 888-ECONSPT. If you customize the inflation rate be certain that you enter an annual rate and not a monthly or semiannual rate.

3.   **Component Cost Estimates**

a.   **Capital Investment**

The capital investment should include all depreciable investment outlays necessary to implement the SEP. Depreciable capital investments are usually buildings, equipment, or other long-lived assets.[6] Typical environmental capital investments include groundwater monitoring wells, stack scrubbers, and wastewater treatment systems. In addition to these conventional capital investments, capital costs may also be associated with projects that do not appear at first to be capital investments. For example, a project to restore a wetland may include capital costs like pipes and pumps.

You may enter capital costs with or without commas or dollar signs. PROJECT will accept decimals but will round the amount to the nearest whole dollar. Enter a zero if capital investment costs will not be incurred. All else being equal, a larger capital investment will result in a higher net present value for the SEP.

b.   **One-Time, Nondepreciable Expenditure**

Include any one-time nondepreciable expenditures necessary to implement the SEP. Such costs could be for materials or labor needed to start up the project (excluding design and installation costs for capital equipment), engineering, financial, or other services (e.g., a training program, waste disposal), or purchasing land. If such expenditures must occur over time and regularly, rather than as a one-time event, enter them as an annually recurring cost. (For example, if the project involves dredging a stream for four years at $100,000 a year, your entry would be $100,000 as an annually recurring cost.)

You may enter the cost estimate with or without commas or dollar signs. PROJECT will accept decimals but will round the amount to the nearest whole dollar. Enter a zero if these costs will not be incurred. All else being equal, a larger one-time nondepreciable expenditure will result in a higher net present values for the SEP.

PROJECT next allows you to override the assumption that the one-time nondepreciable expenditure is tax-deductible. The only one-time nondepreciable expenditure that is not tax-deductible is land. Note that, all else being equal, overriding the tax-deductibility assumption will increase the PROJECT result.

---

[6]   Note that land is not a depreciable capital investment. Land costs should be input as a one-time nondepreciable expenditure, and the tax-deductibility box should be unchecked.

c.   Annually Recurring Costs

For the annually recurring costs associated with implementation of the SEP, enter the net change in expenditures for labor, power, water, raw materials, supplies, training, waste disposal, recycling, lease payments, and property taxes. Annual costs, however, should not include annualized capital recovery, interest payments, or depreciation. Do not enter any annual costs that appear speculative or unsubstantiated.

For some SEP's, the annual cost may be a negative number to reflect net cost savings associated with implementation of the project. (This is particularly likely for a pollution prevention capital improvement, which may make the production process more efficient, e.g., by reducing electricity consumption and waste generation.) PROJECT will calculate the net cost to the company of such a project by evaluating both the capital investment for the new equipment and the operational cost savings.

You may enter annual costs with or without commas or dollar signs. PROJECT will accept decimals but will round the amount to the nearest whole dollar. Enter a zero if no annual costs will be incurred. All else being equal, larger annually recurring costs will result in higher net present values for the SEP.

Enter the number of years for which the annual costs will be credited. The number of years of annual costs should correspond to the number of years that the defendant is legally required to operate the project. EPA takes this position because it has no way to be sure the money will ever be spent on the project without such a legal requirement. The default value is five years because in most cases it would be impractical for the government to monitor a consent decree for more than five years.

PROJECT will not allow you to enter a value that exceeds 15 years. This restriction is based on the expectation that the government cannot continue to monitor whether the defendant is still implementing the SEP 15 or more years after start-up. Further, in most cases changes in technology, market conditions, and environmental conditions create too much uncertainty to reasonably assume that a project will be implemented in the same manner for more than 15 years. Finally, the useful life of capital equipment will typically be 15 years. In many cases these reasons justify limiting the entry for this variable to no more than five years.

You may enter annual costs with or without commas or dollar signs. PROJECT will accept decimals but will round the amount to the nearest whole dollar. Enter a zero if no annual costs will be incurred. All else being equal, larger annually recurring costs will result in a higher net present values for the SEP.

**4.	Project Operation Date**

This is the date when the SEP will commence operation, which is generally when all capital investments and one-time nondepreciable expenditures will have been incurred, and/or the annual costs will first start to be incurred. For example, a pollution control project that requires the installation of a stack scrubber would not be considered operational until all capital costs for the scrubber are expended. In cases where the SEP involves only annual expenses, the project operation date is when the violator begins incurring those costs. The project operation date may occur before or after the penalty payment date. In virtually all cases, however, the project operation date will occur after the commencement of the enforcement action. (Otherwise, the violator is credited for a project that presumably would have been undertaken anyway.)

Holding all other variables constant, the present value of project costs will decrease as the project operation date is pushed further into the future.

Dates can be written out or entered in month/day/ year format. For example, January 4, 1998 can be written as January 4, 1998, Jan 4 1998, 1-4-98, or 1/4/1998. Four-digit years are preferable, although PROJECT will accept some two-digit formats. If using numerical abbreviations, be sure to enter the month first, e.g., PROJECT will interpret 10/2/98 as October 2, 1998, not February 10, 1998.

**5.	Discount Rate**

To compare cost estimates from different dates, PROJECT calculates the initial present value of the costs as of the project operation date, and then the final value as of the penalty payment date. To perform these present value calculations, PROJECT must employ a discount rate that reflects the violator's "time value of money."

PROJECT uses the weighted-average cost of capital ("WACC") to discount cash flows for all for-profit entities. The WACC represents the average cost of capital to the violator, after taxes, assuming constant risk and constant capital structure. PROJECT uses the cost of municipal debt as the basis for the discount rate for not for-profit organizations. When you indicate that the violator is a not for-profit entity, PROJECT automatically defines the discount rate based on average municipal bond yields.

Violators may occasionally request an adjustment in the discount rate to reflect their financial condition more precisely. Make the violator aware that a case-specific analysis could change the discount rate in a way that would lead to a lower present value for the SEP. Furthermore, a case-specific analysis for the PROJECT discount rate might also affect the BEN discount rate. If you alter the discount rate, be sure to enter it as a decimal. PROJECT will automatically convert it to a percentage.

Each year the standard-value discount rates are updated. If you have any questions about the discount rate, including the detailed derivation of the standard values, or guidance on tuning the discount rate to a specific violator or industry, please contact the EPA helpline at 888-ECONSPT.

METHODOLOGY FOR COMPUTING THE VALUE
OF A SUPPLEMENTAL ENVIRONMENTAL PROJECT   **APPENDIX A**

This technical appendix explains the methodology the PROJECT computer program uses to calculate the present value of a supplemental environmental project (SEP). The first section is an introduction to the theory and underlying assumptions of PROJECT. The second section is a step-by-step explanation of a sample PROJECT calculation.

A. THEORY AND ASSUMPTIONS

In some environmental enforcement cases, the violator may be allowed to perform a supplemental environmental project as part of a settlement of the case. EPA defines SEP's as environmentally beneficial projects that a violator undertakes — but is not otherwise legally required to perform — in exchange for favorable penalty consideration in settlement of an enforcement action. The PROJECT computer model assists EPA staff in determining the actual cost of such projects. PROJECT can also calculate the value of injunctive relief.

The actual "true" cost of a SEP to a violator is the after-tax net present value of the project. Net present value is the cost of the project in today's dollars. The concept of present value accounts for the "time value of money": a dollar today is worth more than a dollar one year from now because of investment possibilities. The time value of money is quantified by "discounting" future costs to determine their present value using a discount rate that reflects the violator's cost of money for investments. For this reason, project costs occurring in future years will have a lower net present value in today's dollars. Furthermore, the after-tax net present value will be even lower if the costs of the project are deductible from the violator's taxes, because the project is creating tax savings for the violator.

PROJECT first calculates the present value as of the project operation date (POD), and then determines the final value as of the penalty payment date (PPD). Project cost components include capital investments and one-time nondepreciable expenditures required to install capital equipment

or conduct other activities (e.g., remove contaminated sediments from a stream), as well as annually recurring costs (for operation and maintenance of capital equipment or for other purposes).[1]

PROJECT is easy to use, and designed for people without any background in financial economics. To calculate the present value of a SEP, you must supply the case name, EPA Region, analyst name, tax status, state, penalty payment date, run name, estimated project costs, and project operation date. For the remaining variables (tax, inflation, and discount rates, tax deductibility of one-time nondepreciable expenditures, and number of credited years for annual cost), you can either accept the model's standard values or specify your own.

B.   CALCULATIONS AND SPREADSHEET

PROJECT references a Microsoft Excel™ spreadsheet to perform all of its present value calculations, although you do not need Excel to run PROJECT. The data you enter into the program is automatically transferred to the spreadsheet. The spreadsheet calculates the present value of the SEP and returns the result to the program for output. This section illustrates a PROJECT calculation by taking you step-by-step through relevant portions of the underlying spreadsheet. Italicized comments within brackets are added to explain the calculations, and are not part of the spreadsheet itself.

The spreadsheet is in your PROJECT folder (on your C drive or wherever else you installed PROJECT), filename "proj****.xls". The asterisks represent the most recent year for which EPA has performed updates for the spreadsheet. You may open the file, but it has been write-protected to preserve the integrity of the calculations. This spreadsheet contains necessary formulas and background information like tax rates and discount rates. The background information will be updated once a year, but the calculations themselves will remain the same.

1.   Inputs and Variables

The first section of the spreadsheet contains the variables entered by the user. These are a prerequisite for the calculations. The following is a list of PROJECTS's basic inputs, along with inputs from an example case.

---

[1] PROJECT considers and calculates only the direct financial costs (or savings) associated with implementation of a SEP. PROJECT does not consider any changes in sales, market share, employee morale, or public image that may be associated with some SEP's. Such changes (if present) may have significant financial impacts for the violator, but they are often difficult to estimate and are outside the scope of this analysis.

Inputs	Example	Comments
Case Name	Example Case	
Analyst Name	T.R. Analyst	
EPA Region	EPA Region 1	
Tax Status	C-corp	*[Also known as "Entity Type"]*
State	MA	
Customized Tax Rates?	n	*[You may customize the tax rate, in which case PROJECT*
Federal Tax Rate	35.0%	*will use the customized rate instead of its internal table]*
State Tax Rate	9.50%	
Combined Tax Rate	41.2%	*[Combined = Federal +(State x (1-Federal))]*
Penalty Payment Date (PPD)	01-Jan-1999	
Run Name	Test Run	
Discount Rate	10.0%	*[This is one of PROJECT's two discount values, one for*
Capital Investment:		*companies and one for not-for-profits]*
Cost Estimate	$100,000	
Estimate Date	01-Sep-1996	
Inflation Rate	2.2%	*[This is the default value]*
One-Time, Nondepreciable Expenditure:		
Cost Estimate	$10,000	
Estimate Date	01-Sep-1996	
Inflation Rate	2.2%	*[This is the default value]*
Tax Deductible?	Y	*[This is the default setting]*
Annual Costs:		
Cost Estimate	$1,000	
Estimate Date	01-Sep-1996	
Inflation Rate	2.2%	*[This is the default value]*
Number of Credited Years	5	*[This is the default value]*
Project Operation Date (POD)	01-Jan-2001	

Tax rates are contained in the spreadsheet as a table that contains current corporate and individual federal tax rates and state tax rates. Annual updates will keep tax rates current. When you designate a state and tax status for the violator, PROJECT finds the appropriate federal and state tax rates and calculates a combined tax rate. Because state taxes are deductible from federal taxable income, the combined tax rate calculation is:

Combined tax rate = Federal rate + [State rate x (1 - Federal rate)].

2. **SEP Cost Components**

PROJECT first calculates costs as of the date they will be expended, then adjusts them to the project operation date (POD). The present value (as of the POD) of each date's cash flow is equal to the cash flow multiplied by that date's present value factor. The PV factor uses the discount rate to determine a dollar's equivalent value in POD dollars. Therefore, the PV factor for any date is equal to the sum of one plus the discount rate, raised to the difference in the number of years (including any fractions) between that date and the project operation date.

Capital investments and one-time nondepreciable expenditures are calculated together for the year in which they are originally incurred. PROJECT also calculates the future depreciation tax shields for the initial capital investment.

Annually recurring costs are calculated for the number of credited years. The number of credited years may be customized, but the default value is five, and it may never be more than fifteen. Note that PROJECT automatically adjusts annual costs for inflation, and also adjusts the annual cost for any partial years.

The following page is PROJECT's spreadsheet calculation of the present value of capital, one-time, and annually recurring SEP costs as of the project operation date.

A) Capital & Other One-Time Costs

	01-Jan-2001	01-Jul-2001	01-Jul-2002	01-Jul-2003	01-Jul-2004	01-Jul-2005	01-Jul-2006	01-Jul-2007	01-Jul-2008
One-Time, Nondepreciable Expenditure	(10,990)								
Capital Investment	(109,898)								
Depreciation	0	(15,700)	(26,914)	(19,225)	(13,732)	(9,808)	(9,808)	(9,808)	(4,904)
Marginal Tax Rate	41.2%	41.2%	41.2%	41.2%	41.2%	41.2%	41.2%	41.2%	41.2%
Net After-Tax Cash Flow	(116,360)	6,468	11,088	7,921	5,658	4,041	4,041	4,041	2,021
PV Factor: Adjusts Cash Flow to POD	1.0000	0.9538	0.8671	0.7883	0.7164	0.6513	0.5921	0.5383	0.4892
PV Cash Flow as of POD	(116,360)	6,170	9,615	6,244	4,053	2,632	2,393	2,175	988

Total PV as of POD: **(82,090)** *[Present value of all one-time and capital investment costs as of the project operation date.]*

[Companies may deduct the depreciation of capital equipment from their taxable income. Below is the standard 7-year depreciation schedule, using the half-year convention]

	Depreciation (MACRS):	14.2860%	24.4897%	17.4935%	12.4953%	8.9243%	8.9243%	8.9243%	4.4626%

B) Annually Recurring Costs

Year:	1	2	3	4	5	6	7	8	9
Period of Annual Costs; From:	01-Jan-2001	01-Jan-2002	01-Jan-2003	01-Jan-2004	01-Jan-2005				
To:	01-Jan-2002	01-Jan-2003	01-Jan-2004	01-Jan-2005	01-Jan-2006				
Annual Costs	(1,111)	(1,135)	(1,160)	(1,186)	(1,212)				
Marginal Tax Rate	41.2%	41.2%	41.2%	41.2%	41.2%				
Net After-Tax Cash Flow	(653)	(668)	(682)	(697)	(713)				
PV Factor: Adjusts Cash Flow to POD	0.9535	0.8668	0.7880	0.7163	0.6511				
PV Cash Flow as of POD	(623)	(579)	(538)	(499)	(464)				

Total PV as of POD: **(2,703)** *[Present value of all annual costs as of the project operation date.]*

4. Net Present Value

Once PROJECT has computed the value of capital costs and annually recurring costs, it adds them together to calculate the value of the project as of the project operation date. This initial value is then adjusted to the penalty payment date at the discount rate. To do this, the initial value is multiplied by the sum of one plus the discount rate, raised to the difference in the number of years (including any fractions) between the project operation date and the penalty payment date. The final net present value of the proposed project as of the penalty payment date is the maximum amount by which you may mitigate the penalty.

	Run Name = Test Run	**Comments**
Present Values as of Project Operation Date: 01-Jan-2001		
A) Capital & Other One-Time Costs	$82,090	*[From previous calculation]*
B) Annually Recurring Costs	$2,703	*[From previous calculation]*
C) Initial Project Value (A+B)	$84,793	*[Value as of project operation date]*
D) Final Proj. Value at Penalty Payment Date,		
01-Jan-1999	**$70,058**	*[Final result, value as of penalty payment date]*

Effective May 1, 1998

Note that this policy's references to the PROJECT model are for the older DOS model, but the new WindowsTM versions of the model and User's Manual supplant any prior versions.

A.   INTRODUCTION

1.   Background

In settlements of environmental enforcement cases, the U.S. Environmental Protection Agency (EPA) requires the alleged violators to achieve and maintain compliance with Federal environmental laws and regulations and to pay a civil penalty. To further EPA's goals to protect and enhance public health and the environment, in certain instances environmentally beneficial projects, or Supplemental Environmental Projects (SEPs), may be part of the settlement. This Policy sets forth the types of projects that are permissible as SEPs, the penalty mitigation appropriate for a particular SEP, and the terms and conditions under which they may become part of a settlement. The primary purpose of this Policy is to encourage and obtain environmental and public health protection and improvements that may not otherwise have occurred without the settlement incentives provided by this Policy.

In settling enforcement actions, EPA requires alleged violators to promptly cease the violations and, to the extent feasible, remediate any harm caused by the violations. EPA also seeks substantial monetary penalties in order to deter noncompliance. Without penalties, regulated entities would have an incentive to delay compliance until they are caught and ordered to comply. Penalties promote environmental compliance and help protect public health by deterring future violations by the same violator and deterring violations by other members of the regulated community. Penalties help ensure a national level playing field by ensuring that violators do not obtain an unfair economic advantage over their competitors who made the necessary expenditures to comply on time. Penalties also encourage regulated entities to adopt pollution prevention and recycling techniques in order to minimize their pollutant discharges and reduce their potential liabilities.

Statutes administered by EPA generally contain penalty assessment criteria that a court or administrative law judge must consider in determining an appropriate penalty at trial or a hearing. In the settlement context, EPA generally follows these criteria in exercising its discretion to establish an appropriate settlement penalty. In establishing an appropriate penalty, EPA considers such factors as the economic benefit associated with the violations, the gravity or seriousness of the violations,

and prior history of violations. Evidence of a violator's commitment and ability to perform a SEP is also a relevant factor for EPA to consider in establishing an appropriate settlement penalty. All else being equal, the final settlement penalty will be lower for a violator who agrees to perform an acceptable SEP compared to the violator who does not agree to perform a SEP.

The Agency encourages the use of SEPs that are consistent with this Policy. SEPs may not be appropriate in settlement of all cases, but they are an important part of EPA's enforcement program. While penalties play an important role in environmental protection by deterring violations and creating a level playing field, SEPs can play an additional role in securing significant environmental or public health protection and improvements. SEPs may be particularly appropriate to further the objectives in the statutes EPA administers and to achieve other policy goals, including promoting pollution prevention and environmental justice.

2.   Pollution Prevention and Environmental Justice

The Pollution Prevention Act of 1990 (42 U.S.C. §13101 et seq., November 5, 1990) identifies an environmental management hierarchy in which pollution "should be prevented or reduced whenever feasible; pollution that cannot be prevented should be recycled in an environmentally safe manner whenever feasible; pollution that cannot be prevented or recycled should be treated in an environmentally safe manner whenever feasible; and disposal or other release into the environment should be employed only as a last resort …" (42 U.S.C. §13103). Selection and evaluation of proposed SEPs should be conducted generally in accordance with this hierarchy of environmental management, i.e., SEPs involving pollution prevention techniques are preferred over other types of reduction or control strategies, and this can be reflected in the degree of consideration accorded to a defendant/respondent before calculation of the final monetary penalty.

Further, there is an acknowledged concern, expressed in Executive Order 12898 on environmental justice, that certain segments of the nation's population, i.e., low-income and/or minority populations, are disproportionately burdened by pollutant exposure. Emphasizing SEPs in communities where environmental justice concerns are present helps ensure that persons who spend significant portions of their time in areas, or depend on food and water sources located near, where the violations occur would be protected. Because environmental justice is not a specific technique or process but an overarching goal, it is not listed as a particular SEP category; but EPA encourages SEPs in communities where environmental justice may be an issue.

3.   Using this Policy

In evaluating a proposed project to determine if it qualifies as a SEP and then determining how much penalty mitigation is appropriate, Agency enforcement and compliance personnel should use the following five-step process:

(1)   Ensure that the project meets the basic definition of a SEP. (Section B)

(2)   Ensure that all legal guidelines, including nexus, are satisfied. (Section C)

(3)   Ensure that the project fits within one (or more) of the designated categories of SEPs. (Section D)

(4)   Determine the appropriate amount of penalty mitigation. (Section E)

(5)   Ensure that the project satisfies all of the implementation and other criteria. (Sections F, G, H, I and J)

4.   Applicability

This Policy revises and hereby supersedes the February 12, 1991 Policy on the Use of Supplemental Environmental Projects in EPA Settlements and the May 1995 Interim Revised Supplemental Environmental Projects Policy. This Policy applies to settlements of all civil judicial and administrative actions filed after the effective date of this Policy (May 1, 1998), and to all pending cases in which the government has not reached agreement in principle with the alleged violator on the specific terms of a SEP.

This Policy applies to all civil judicial and administrative enforcement actions taken under the authority of the environmental statutes and regulations that EPA administers. It also may be used by EPA and the Department of Justice in reviewing proposed SEPs in settlement of citizen suits. This Policy also applies to federal agencies that are liable for the payment of civil penalties. Claims for stipulated penalties for violations of consent decrees or other settlement agreements may not be mitigated by the use of SEPs.[1]

This is a settlement Policy and thus is not intended for use by EPA, defendants, respondents, courts or administrative law judges at a hearing or in a trial. Further, whether the Agency decides to accept a proposed SEP as part of a settlement, and the amount of any penalty mitigation that may be given for a particular SEP, is purely within EPA's discretion. Even though a project appears to satisfy all of the provisions of this Policy, EPA may decide, for one or more reasons, that a SEP is

---

[1] In extraordinary circumstances, the Assistant Administrator may consider mitigating potential stipulated penalty liability using SEPs where: (1) despite the circumstances giving rise to the claim for stipulated penalties, the violator has the ability and intention to comply with a new settlement agreement obligation to implement the SEP; (2) there is no negative impact on the deterrent purposes of stipulated penalties; and (3) the settlement agreement establishes a range for stipulated penalty liability for the violations at issue. For example, if a respondent/defendant has violated a settlement agreement which provides that a violation of X requirement subjects it to a stipulated penalty between $1,000 and $5,000, then the Agency may consider SEPs in determining the specific penalty amount that should be demanded.

not appropriate (e.g., the cost of reviewing a SEP proposal is excessive, the oversight costs of the SEP may be too high, the defendant/respondent may not have the ability or reliability to complete the proposed SEP, or the deterrent value of the higher penalty amount outweighs the benefits of the proposed SEP).

This Policy establishes a framework for EPA to use in exercising its enforcement discretion in determining appropriate settlements. In some cases, application of this Policy may not be appropriate, in whole or part. In such cases, the litigation team may, with the advance approval of Headquarters, use an alternative or modified approach.

B.   DEFINITION AND KEY CHARACTERISTICS OF A SEP

Supplemental environmental projects are defined as environmentally beneficial projects which a defendant/respondent agrees to undertake in settlement of an enforcement action, but which the defendant/respondent is not otherwise legally required to perform. The three bolded key parts of this definition are elaborated below.

"*Environmentally beneficial*" means a SEP must improve, protect, or reduce risks to public health, or the environment at large. While in some cases a SEP may provide the alleged violator with certain benefits, there must be no doubt that the project primarily benefits the public health or the environment.

"*In settlement of an enforcement action*" means:

1)   EPA has the opportunity to help shape the scope of the project before it is implemented; and

2)   the project is not commenced until after the Agency has identified a violation (e.g., issued a notice of violation, administrative order, or complaint).[2]

"*Not otherwise legally required to perform*" means the project or activity is not required by any federal, state or local law or regulation. Further, SEPs cannot include actions which the defendant/respondent is likely to be required to perform:

---

[2]   Since the primary purpose of this Policy is to obtain environmental or public health benefits that may not have occurred "but for" the settlement, projects which the defendant has previously committed to perform or have been started before the Agency has identified a violation are not eligible as SEPs. Projects which have been committed to or started before the identification of a violation may mitigate the penalty in other ways. Depending on the specifics, if a regulated entity had initiated environmentally beneficial projects before the enforcement process commenced, the initial penalty calculation could be lower due to the absence of recalcitrance, no history of other violations, good faith efforts, less severity of the violations, or a shorter duration of the violations

(a)   as injunctive relief[3] in the instant case;

(b)   as injunctive relief in another legal action EPA, or another regulatory agency could bring;

(c)   as part of an existing settlement or order in another legal action; or,

(d)   by a state or local requirement.

SEPs may include activities which the defendant/respondent will become legally obligated to undertake two or more years in the future, if the project will result in the facility coming into compliance earlier than the deadline. Such "accelerated compliance" projects are not allowable, however, if the regulation or statute provides a benefit (e.g., a higher emission limit) to the defendant/respondent for early compliance.

Also, the performance of a SEP reduces neither the stringency nor timeliness requirements of Federal environmental statutes and regulations. Of course, performance of a SEP does not alter the defendant/respondent's obligation to remedy a violation expeditiously and return to compliance.

C.   LEGAL GUIDELINES

EPA has broad discretion to settle cases, including the discretion to include SEPs as an appropriate part of the settlement. The legal evaluation of whether a proposed SEP is within EPA's authority and consistent with all statutory and Constitutional requirements may be a complex task. Accordingly, this Policy uses five legal guidelines to ensure that our SEPs are within the Agency's and a federal court's authority, and do not run afoul of any Constitutional or statutory requirements.[4]

1.   A project cannot be inconsistent with any provision of the underlying statutes.

2.   All projects must advance at least one of the objectives of the environmental statutes that are the basis of the enforcement action and must have adequate nexus. Nexus is the relationship between the violation and the proposed project. This relationship exists only if:

---

[3]   The statutes EPA administers generally provide a court with broad authority to order a defendant to cease its violations, take necessary steps to prevent future violations, and to remediate any harm caused by the violations. If a court is likely to order a defendant to perform a specific activity in a particular case, such an activity does not qualify as a SEP.

[4]   These legal guidelines are based on federal law as it applies to EPA; States may have more or less flexibility in the use of SEPs depending on their laws.

a.   the project is designed to reduce the likelihood that similar violations will occur in the future; or

b.   the project reduces the adverse impact to public health or the environment to which the violation at issue contributes; or

c.   the project reduces the overall risk to public health or the environment potentially affected by the violation at issue.

Nexus is easier to establish if the primary impact of the project is at the site where the alleged violation occurred or at a different site in the same ecosystem or within the immediate geographic[5] area. Such SEPs may have sufficient nexus even if the SEP addresses a different pollutant in a different medium. In limited cases, nexus may exist even though a project will involve activities outside of the United States.[6] The cost of a project is not relevant to whether there is adequate nexus.

3.   EPA may not play any role in managing or controlling funds that may be set aside or escrowed for performance of a SEP. Nor may EPA retain authority to manage or administer the SEP. EPA may, of course, perform oversight to ensure that a project is implemented pursuant to the provisions of the settlement and have legal recourse if the SEP is not adequately performed.

4.   The type and scope of each project are defined in the signed settlement agreement. This means the "what, where and when" of a project are defined by the settlement agreement. Settlements in which the defendant/respondent agrees to spend a certain sum of money on a project(s) to be defined later (after EPA or the Department of Justice signs the settlement agreement) are not allowed.

5.   a.   A project cannot be used to satisfy EPA's statutory obligation or another federal agency's obligation to perform a particular activity. Conversely, if a federal statute prohibits the expenditure of federal resources on a particular activity, EPA cannot consider projects that would appear to circumvent that prohibition.

---

[5]   The immediate geographic area will generally be the area within a 50 mile radius of the site on which the violations occurred. Ecosystem or geographic proximity is not by itself a sufficient basis for nexus; a project must always satisfy subparagraph a, b, or c in the definition of nexus. In some cases, a project may be performed at a facility or site not owned by the defendant/respondent.

[6]   All projects which would include activities outside the U.S. must be approved in advance by Headquarters and/or the department of Justice. See section J.

b. A project may not provide EPA or any federal agency with additional resources to perform a particular activity for which Congress has specifically appropriated funds. A project may not provide EPA with additional resources to perform a particular activity for which Congress has earmarked funds in an appropriations committee report.[7] Further, a project cannot be used to satisfy EPA's statutory or earmark obligation, or another federal agency's statutory obligation, to spend funds on a particular activity. A project, however, may be related to a particular activity for which Congress has specifically appropriated or earmarked funds.

c. A project may not provide additional resources to support specific activities performed by EPA employees or EPA contractors. For example, if EPA has developed a brochure to help a segment of the regulated community comply with environmental requirements, a project may not directly, or indirectly, provide additional resources to revise, copy or distribute the brochure.

d. A project may not provide a federal grantee with additional funds to perform a specific task identified within an assistance agreement.

D. CATEGORIES OF SUPPLEMENTAL ENVIRONMENTAL PROJECTS

EPA has identified seven specific categories of projects which may qualify as SEPs. In order for a proposed project to be accepted as a SEP, it must satisfy the requirements of at least one category plus all the other requirements established in this Policy.

1. Public Health

A public health project provides diagnostic, preventative and/or remedial components of human health care which is related to the actual or potential damage to human health caused by the violation. This may include epidemiological data collection and analysis, medical examinations of potentially affected persons, collection and analysis of blood/fluid/ tissue samples, medical treatment and rehabilitation therapy.

Public health SEPs are acceptable only where the primary benefit of the project is the population that was harmed or put at risk by the violations.

---

[7] Earmarks are instructions for changes to EPA's discretionary budget authority made by appropriations committee in committee reports that the Agency generally honors as a matter of policy.

2.   Pollution Prevention

A pollution prevention project is one which reduces the generation of pollution through "source reduction," i.e., any practice which reduces the amount of any hazardous substance, pollutant or contaminant entering any waste stream or otherwise being released into the environment, prior to recycling, treatment or disposal. (After the pollutant or waste stream has been generated, pollution prevention is no longer possible and the waste must be handled by appropriate recycling, treatment, containment, or disposal methods.)

Source reduction may include equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, inventory control, or other operation and maintenance procedures. Pollution prevention also includes any project which protects natural resources through conservation or increased efficiency in the use of energy, water or other materials. "In-process recycling," wherein waste materials produced during a manufacturing process are returned directly to production as raw materials on site, is considered a pollution prevention project.

In all cases, for a project to meet the definition of pollution prevention, there must be an overall decrease in the amount and/or toxicity of pollution released to the environment, not merely a transfer of pollution among media. This decrease may be achieved directly or through increased efficiency (conservation) in the use of energy, water or other materials. This is consistent with the Pollution Prevention Act of 1990 and the Administrator's "Pollution Prevention Policy Statement: New Directions for Environmental Protection," dated June 15, 1993

3.   Pollution Reduction

If the pollutant or waste stream already has been generated or released, a pollution reduction approach — which employs recycling, treatment, containment or disposal techniques — may be appropriate. A pollution reduction project is one which results in a decrease in the amount and/or toxicity of any hazardous substance, pollutant or contaminant entering any waste stream or otherwise being released into the environment by an operating business or facility by a means which does not qualify as "pollution prevention." This may include the installation of more effective end-of-process control or treatment technology, or improved containment, or safer disposal of an existing pollutant source. Pollution reduction also includes "out-of-process recycling," wherein industrial waste collected after the manufacturing process and/or consumer waste materials are used as raw materials for production off-site.

4. Environmental Restoration and Protection

An environmental restoration and protection project is one which enhances the condition of the ecosystem or immediate geographic area adversely affected.[8] These projects may be used to restore or protect natural environments (such as ecosystems) and man-made environments, such as facilities and buildings. This category also includes any project which protects the ecosystem from actual or potential damage resulting from the violation or improves the overall condition of the ecosystem.[9] Examples of such projects include: restoration of a wetland in the same ecosystem along the same avian flyway in which the facility is located; or purchase and management of a watershed area by the defendant/respondent to protect a drinking water supply where the violation (e.g., a reporting violation) did not directly damage the watershed but potentially could lead to damage due to unreported discharges. This category also includes projects which provide for the protection of endangered species (e.g., developing conservation programs or protecting habitat critical to the well-being of a species endangered by the violation).

In some projects where a defendant/respondent has agreed to restore and then protect certain lands, the question arises as to whether the project may include the creation or maintenance of certain recreational improvements, such as hiking and bicycle trails. The costs associated with such recreational improvements may be included in the total SEP cost provided they do not impair the environmentally beneficial purposes of the project and they constitute only an incidental portion of the total resources spent on the project.

In some projects where the parties intend that the property be protected so that the ecological and pollution reduction purposes of the land are maintained in perpetuity, the defendant/respondent may sell or transfer the land to another party with the established resources and expertise to perform this function, such as a state park authority. In some cases, the U.S. Fish and Wildlife Service or the National Park Service may be able to perform this function.[10]

With regard to man-made environments, such projects may involve the remediation of facilities and buildings, provided such activities are not otherwise legally required. This includes the removal/mitigation of contaminated materials, such as soils, asbestos and lead paint, which are a continuing source of releases and/or threat to individuals.

---

[8] If EPA lacks authority to require repair of the damage caused by the violation, then repair itself may constitute a SEP.

[9] Simply preventing new discharges into the ecosystem, as opposed to taking affirmative action directly related to preserving existing conditions at a property, would not constitute a restoration and protection project, but may fit into another category such as pollution prevention or pollution reduction.

[10] These federal agencies have explicit statutory authority to accept gifts of land and money in certain circumstances. All projects with these federal agencies must be reviewed and approved in advance by legal counsel in the agency, usually the Solicitor's Office in the Department of the Interior.

5.   <u>**Assessments and Audits**</u>

Assessments and audits, if they are not otherwise available as injunctive relief, are potential SEPs under this category. There are three types of projects in this category:

     a.   pollution prevention assessments;

     b.   environmental quality assessments; and

     c.   compliance audits.

These assessments and audits are only acceptable as SEPs when the defendant/respondent agrees to provide EPA with a copy of the report. The results may be made available to the public, except to the extent they constitute confidential business information pursuant to 40 CFR Part 2, Subpart B.

     a.   *Pollution prevention assessments* are systematic, internal reviews of specific processes and operations designed to identify and provide information about opportunities to reduce the use, production, and generation of toxic and hazardous materials and other wastes. To be eligible for SEPs, such assessments must be conducted using a recognized pollution prevention assessment or waste minimization procedure to reduce the likelihood of future violations. Pollution prevention assessments are acceptable as SEPs without an implementation commitment by the defendant/respondent. Implementation is not required because drafting implementation requirements before the results of an assessment are known is difficult. Further, many of the implementation recommendations may constitute activities that are in the defendant/respondent's own economic interest.

     b.   *Environmental quality assessments* are investigations of: the condition of the environment at a site not owned or operated by the defendant/respondent; the environment impacted by a site or a facility regardless of whether the site or facility is owned or operated by the defendant/respondent; or threats to human health or the environment relating to a site or a facility regardless of whether the site or facility is owned or operated by the defendant/respondent. These include, but are not limited to: investigations of levels or sources of contamination in any environmental media at a site; or monitoring of the air, soil, or water quality surrounding a site or facility. To be eligible as SEPs, such assessments must be conducted in accordance with recognized protocols, if available, applicable to the type of assessment to be undertaken. Expanded sampling or monitoring by a defendant/respondent of its own emissions or operations does not qualify as a SEP to the extent it is ordinarily available as injunctive relief.

Environmental quality assessment SEPs may not be performed on the following types of sites: sites that are on the National Priority List under CERCLA §105, 40 CFR Part 300, Appendix B; sites that would qualify for an EPA removal action pursuant to CERCLA §104(a) and the National Oil and Hazardous Substances Pollution Contingency Plan, 40 CFR §300.415; and sites for which the defendant/respondent or another party would likely be ordered to perform a remediation activity pursuant to CERCLA §106, RCRA §7003, RCRA 3008(h), CWA §311, or another federal law.

c. *Environmental compliance audits* are independent evaluations of a defendant/respondent's compliance status with environmental requirements. Credit is only given for the costs associated with conducting the audit. While the SEP should require all violations discovered by the audit to be promptly corrected, no credit is given for remedying the violation since persons are required to achieve and maintain compliance with environmental requirements. In general, compliance audits are acceptable as SEPs only when the defendant/respondent is a small business or small community.[11] [12]

6. Environmental Compliance Promotion

An environmental compliance promotion project provides training or technical support to other members of the regulated community to: 1) identify, achieve and maintain compliance with applicable statutory and regulatory requirements or 2) go beyond compliance by reducing the generation, release or disposal of pollutants beyond legal requirements. For these types of projects, the defendant/respondent may lack the experience, knowledge or ability to implement the project itself, and, if so, the defendant/respondent should be required to contract with an appropriate expert to develop and implement the compliance promotion project. Acceptable projects may include, for example, producing a seminar directly related to correcting widespread or prevalent violations within the defendant/ respondent's economic sector.

Environmental compliance promotion SEPs are acceptable only where the primary impact of the project is focused on the same regulatory program requirements which were violated and where EPA has reason to believe that compliance in the sector would be significantly advanced by

---

[11] For purposes of this Policy, a small business is owned by a person or another entity that employs 100 or fewer individuals. Small businesses could be individuals, privately held corporations, farmers, landowners, partnerships and others. A small community is one comprised of fewer than 2,500 persons.

[12] Since most large companies routinely conduct compliance audits, to mitigate penalties for such audits would reward violators for performing an activity that most companies already do. In contrast, these audits are not commonly done by small businesses, perhaps because such audits may be too expensive.

the proposed project. For example, if the alleged violations involved Clean Water Act pretreatment violations, the compliance promotion SEP must be directed at ensuring compliance with pretreatment requirements. Environmental compliance promotion SEPs are subject to special approval requirements per Section J below.

7.   Emergency Planning and Preparedness

An emergency planning and preparedness project provides assistance — such as computers and software, communication systems, chemical emission detection and inactivation equipment, HAZMAT equipment, or training — to a responsible state or local emergency response or planning entity. This is to enable these organizations to fulfill their obligations under the Emergency Planning and Community Right-to-Know Act (EPCRA) to collect information to assess the dangers of hazardous chemicals present at facilities within their jurisdiction, to develop emergency response plans, to train emergency response personnel and to better respond to chemical spills.

EPCRA requires regulated sources to provide information on chemical production, storage and use to State Emergency Response Commissions (SERCs), Local Emergency Planning Committees (LEPCs) and Local Fire Departments (LFDs). This enables states and local communities to plan for and respond effectively to chemical accidents and inform potentially affected citizens of the risks posed by chemicals present in their communities, thereby enabling them to protect the environment or ecosystems which could be damaged by an accident. Failure to comply with EPCRA impairs the ability of states and local communities to meet their obligations and places emergency response personnel, the public and the environment at risk from a chemical release.

Emergency planning and preparedness SEPs are acceptable where the primary impact of the project is within the same emergency planning district or state affected by the violations and EPA has not previously provided the entity with financial assistance for the same purposes as the proposed SEP. Further, this type of SEP is allowable only when the SEP involves non-cash assistance and there are violations of EPCRA, or reporting violations under CERCLA §103, or CAA §112(r), or violations of other emergency planning, spill or release requirements alleged in the complaint.

8.   Other Types of Projects

Projects determined by the case team to have environmental merit which do not fit within at least one of the seven categories above but that are otherwise fully consistent with all other provisions of this Policy, may be accepted with the advance approval of the Office of Enforcement and Compliance Assurance.

9. **Projects Which Are Not Acceptable as SEPs**

The following are examples of the types of projects that are not allowable as SEPs:

a. General public educational or public environmental awareness projects, e.g., sponsoring public seminars, conducting tours of environmental controls at a facility, promoting recycling in a community;

b. Contributions to environmental research at a college or university;

c. Conducting a project, which, though beneficial to a community, is unrelated to environmental protection, e.g., making a contribution to a non-profit, public interest, environmental, or other charitable organization, or donating playground equipment;

d. Studies or assessments without a requirement to address the problems identified in the study (except as provided for in §D.5 above);

e. Projects which the defendant/respondent will undertake, in whole or part, with low-interest federal loans, federal contracts, federal grants, or other forms of federal financial assistance or non-financial assistance (e.g., loan guarantees).

E. **CALCULATION OF THE FINAL PENALTY**

Substantial penalties are an important part of any settlement for legal and policy reasons. Without penalties there would be no deterrence, as regulated entities would have little incentive to comply. Additionally, penalties are necessary as a matter of fairness to those regulated entities that make the necessary expenditures to comply on time: violators should not be allowed to obtain an economic advantage over their competitors who complied.

As a general rule, the net costs to be incurred by a violator in performing a SEP may be considered as one factor in determining an appropriate settlement amount. In settlements in which defendant/respondents commit to conduct a SEP, the final settlement penalty must equal or exceed either:
   a) the economic benefit of noncompliance plus 10 percent of the gravity component; or

   b) 25 percent of the gravity component only; whichever is greater.

Calculating the final penalty in a settlement which includes a SEP is a five step process. Each of the five steps is explained below. The five steps are also summarized in the penalty calculation worksheet attached to this Policy.

Step 1:   **Settlement Amount Without a SEP**

    a.   The applicable EPA penalty policy is used to calculate the economic benefit of noncompliance.

    b.   The applicable EPA penalty policy is used to calculate the gravity component of the penalty. The gravity component is all of the penalty other than the identifiable economic benefit amount, after gravity has been adjusted by all other factors in the penalty policy (e.g., audits, good faith, litigation considerations), except for the SEP.

    c.   The amounts in steps 1.a and b are added. This sum is the minimum amount that would be necessary to settle the case without a SEP.

Step 2:   **Minimum Penalty Amount With a SEP**

The minimum penalty amount must equal or exceed the economic benefit of noncompliance plus 10 percent of the gravity component, or 25 percent of the gravity component only, whichever is greater. The minimum penalty amount is calculated as follows:

    a.   Calculate 10 percent of gravity (multiply amount in step 1.b by 0.1).

    b.   Add economic benefit (amount in step 1.a) to amount in step 2.a.

    c.   Calculate 25 percent of gravity (multiply amount in step 1.b by 0.25).

    d.   Identify the minimum penalty amount: the greater of step 2.c or step 2.b.[13]

Step 3.   **Calculate the SEP Cost**

The net present after-tax cost of the SEP, hereinafter called the "SEP COST," is the maximum amount that EPA may take into consideration in determining an appropriate penalty mitigation for performance of a SEP. In order to facilitate evaluation of the SEP COST of a proposed project, the Agency has developed a computer model called PROJECT.[14] There are three

---

[13] Pursuant to the February 1995 Revised Interim Clean Water Act Settlement Penalty Policy, section V, a smaller minimum penalty amount may be allowed for a municipality.

[14] A copy of the PROJECT computer program software and PROJECT User's Manual may be purchased by calling that National Technology Information Service at (800) 553-6847, and asking for Document #PB 98-500408GEI, or they may be downloaded from the World Wide Web at "http://www.epa.gov/oeca/models/".

types of costs that may be associated with performance of a SEP (which are entered into the PROJECT model): capital costs (e.g., equipment, buildings); one-time nondepreciable costs (e.g., removing contaminated materials, purchasing land, developing a compliance promotion seminar); and annual operation costs and savings (e.g., labor, chemicals, water, power, raw materials).[15]

To use PROJECT, the Agency needs reliable estimates of the costs associated with a defendant/respondent's performance of a SEP, as well as any savings due to such factors as energy efficiency gains, reduced materials costs, reduced waste disposal costs, or increases in productivity. For example, if the annual expenditures in labor and materials of operating a new waste recycling process is $100,000 per year, but the new process reduces existing hazardous waste disposal expenditures by $30,000 per year, the net cost of $70,000 is entered into the PROJECT model (variable 4).

In order to run the PROJECT model properly (i.e., to produce a reasonable estimate of the net present after-tax cost of the project), the number of years that annual operation costs or savings will be expended in performing the SEP must be specified. At a minimum, the defendant/respondent must be required to implement the project for the same number of years used in the PROJECT model calculation. (For example, if the settlement agreement requires the defendant/respondent to operate the SEP equipment for two years, two years should be entered as the input for number of years of annual expense in the PROJECT model.) If certain costs or savings appear speculative, they should not be entered into the PROJECT model. The PROJECT model is the primary method to determine the SEP COST for purposes of negotiating settlements.[16]

EPA does not offer tax advice on whether a regulated entity may deduct SEP expenditures from its income taxes. If a defendant/respondent states that it will not deduct the cost of a SEP from its taxes and it is willing to commit to this in the settlement document, and provide the Agency with certification upon completion of the SEP that it has not deducted the SEP expenditures, the PROJECT model calculation should be adjusted to calculate the SEP Cost without reductions for taxes. This is a simple adjustment to the PROJECT model: just enter a zero for variable 7, the

---

[15] The PROJECT calculated SEP Cost is a reasonable estimate, and not an exact after-tax calculation. PROJECT does not evaluate the potential for market benefits which may accrue with the performance of a SEP (e.g., increased sales of a product, improved corporate public image, or improved employee morale). Nor does it consider costs imposed on the government, such as the cost to the Agency for oversight of the SEP, or the burden of a lengthy negotiation with a defendant/ respondent who does not propose a SEP until late in the settlement process; such factors may be considered in determining a mitigation percentage rather than in calculating after-tax cost.

[16] See PROJECT User's Manual, January 1995. If the PROJECT model appears inappropriate to a particular fact situation, EPA Headquarters should be consulted to identify an alternative approach. For example, PROJECT does not readily calculate the cost of an accelerated compliance SEP. The cost of such a SEP is only the additional cost associated with doing the project early (ahead of the regulatory requirement) and it needs to be calculated in a slightly different manner. Please consult with the Office Of Regulatory Enforcement for directions on how to calculate the costs of such projects.

marginal tax rate. If a business is not willing to make this commitment, the marginal tax rate in variable 7 should not be set to zero; rather the default settings (or a more precise estimate of the business' marginal tax rates) should be used in variable 7.

If the PROJECT model reveals that a project has a negative cost during the period of performance of the SEP, this means that it represents a positive cash flow to the defendant/respondent and is a profitable project. Such a project is generally not acceptable as a SEP. If a project generates a profit, a defendant/respondent should, and probably will, based on its own economic interests, implement the project. While EPA encourages regulated entities to undertake environmentally beneficial projects that are economically profitable, EPA does not believe violators should receive a bonus in the form of penalty mitigation to undertake such projects as part of an enforcement action. EPA does not offer subsidies to complying companies to undertake profitable environmentally beneficial projects and it would thus be inequitable and perverse to provide such subsidies only to violators. In addition, the primary goal of SEPs is to secure a favorable environmental or public health outcome which would not have occurred but for the enforcement case settlement. To allow SEP penalty mitigation for profitable projects would thwart this goal.[17]

Step 4: **Determine the SEP Mitigation Percentage and then the Mitigation Amount**

Step 4.a: Mitigation Percentage. After the SEP COST has been calculated, EPA should determine what percentage of that cost may be applied as mitigation against the amount EPA would settle for but for the SEP. The quality of the SEP should be examined as to whether and how effectively it achieves each of the following six factors listed below. (The factors are not listed in priority order.)

Benefits to the Public or Environment at Large. While all SEPs benefit public health or the environment, SEPs which perform well on this factor will result in significant and quantifiable reduction in discharges of pollutants to the environment and the reduction in risk to the general public. SEPs also will perform well on this factor to the extent they result in significant and, to the extent possible, measurable progress in protecting and restoring ecosystems (including wetlands and endangered species habitats).

Innovativeness. SEPs which perform well on this factor will further the development, implementation, or dissemination of innovative processes, technologies, or methods which more effectively: reduce the generation, release or disposal of pollutants; conserve natural resources; restore and protect ecosystems; protect endangered species; or promote

---

[17] The penalty mitigation guidelines provide that the amount of mitigation should not exceed the net cost of the project. To provide penalty mitigation for profitable projects would be providing a credit in excess of net costs.

compliance. This includes "technology forcing" techniques which may establish new regulatory "benchmarks."

Environmental Justice. SEPs which perform well on this factor will mitigate damage or reduce risk to minority or low income populations which may have been disproportionately exposed to pollution or are at environmental risk.

Community Input. SEPs which perform well on this factor will have been developed taking into consideration input received from the affected community. No credit should be given for this factor if the defendant/respondent did not actively participate in soliciting and incorporating public input into the SEP.

Multimedia Impacts. SEPs which perform well on this factor will reduce emissions to more than one medium.

Pollution Prevention. SEPs which perform well on this factor will develop and implement pollution prevention techniques and practices.

The better the performance of the SEP under each of these factors, the higher the appropriate mitigation percentage. The percent of penalty mitigation is within EPA's discretion; there is no presumption as to the correct percentage of mitigation.

The mitigation percentage should <u>not</u> exceed 80 percent of the SEP COST, with two exceptions:

(1)   For small businesses, government agencies or entities, and non-profit organizations, this mitigation percentage of the SEP COST may be set as high as 100 percent if the defendant/respondent can demonstrate the project is of outstanding quality.

(2)   For any defendant/respondent, if the SEP implements pollution prevention, the mitigation percentage of the SEP COST may be set as high as 100 percent if the defendant/respondent can demonstrate that the project is of outstanding quality.

If the government must allocate significant resources to monitoring and reviewing the implementation of a project, a lower mitigation percentage of the SEP COST may be appropriate.

In administrative enforcement actions in which there is a statutory limit (commonly called "caps") on the total maximum penalty that may be sought in a single action, the cash penalty obtained plus the amount of penalty mitigation credit due to the SEPs shall not exceed the limit.

Step 4.b: SEP Mitigation Amount. The SEP COST (calculated pursuant to step 3) is multiplied by the mitigation percentage (step 4.a) to obtain the SEP mitigation amount, which is the amount of the SEP cost that may be used in potentially mitigating the preliminary settlement penalty.

Step 5:   **Final Settlement Penalty**

5.a. The SEP mitigation amount (step 4.b) is then subtracted from the settlement amount without a SEP (step 1.c).

5.b. The greater of step 2.d or step 5.a is the minimum final settlement penalty allowable based on the performance of the SEP.

F.   LIABILITY FOR PERFORMANCE

Defendants/respondents (or their successors in interest) are responsible and legally liable for ensuring that a SEP is completed satisfactorily. A defendant/respondent may not transfer this responsibility and liability to someone else, commonly called a third party. Of course, a defendant/respondent may use contractors or consultants to assist it in implementing a SEP.[18]

G.   OVERSIGHT AND DRAFTING ENFORCEABLE SEPS

The settlement agreement should accurately and completely describe the SEP. (See related legal guideline 4 in § C above.) It should describe the specific actions to be performed by the defendant/respondent and provide for a reliable and objective means to verify that the defendant/respondent has timely completed the project. This may require the defendant/respondent to submit periodic reports to EPA. The defendant/respondent may utilize an outside auditor to verify performance, and the defendant/respondent should be made responsible for the cost of any such activities. The defendant/respondent remains responsible for the quality and timeliness of any actions performed or any reports prepared or submitted by the auditor. A final report certified by an appropriate corporate official, acceptable to EPA, and evidencing completion of the SEP and documenting SEP expenditures, should be required.

To the extent feasible, defendant/respondents should be required to quantify the benefits associated with the project and provide EPA with a report setting forth how the benefits were measured or estimated. The defendant/respondent should agree that whenever it publicizes a SEP or the results of a SEP, it will state in a prominent manner that the project is being undertaken as part of the settlement of an enforcement action.

The drafting of a SEP will vary depending on whether the SEP is being performed as part of an administrative or judicial enforcement action. SEPs with long implementation schedules (e.g., 18 months or longer), SEPs which require EPA review and comment on interim milestone activities,

---

[18]   Non-profit organizations, such as universities and public interest groups, may function as contractors or consultants.

and other complex SEPs may not be appropriate in administrative enforcement actions. Specific guidance on the proper drafting of settlement documents requiring SEPs is provided in a separate document.

H.   FAILURE OF A SEP AND STIPULATED PENALTIES

If a SEP is not completed satisfactorily, the defendant/respondent should be required, pursuant to the terms of the settlement document, to pay stipulated penalties for its failure. Stipulated penalty liability should be established for each of the scenarios set forth below as appropriate to the individual case.

1.   Except as provided in paragraph 2 immediately below, if the SEP is not completed satisfactorily, a substantial stipulated penalty should be required. Generally, a substantial stipulated penalty is between 75 and 150 percent of the amount by which the settlement penalty was mitigated on account of the SEP. 2. If the SEP is not completed satisfactorily, but the defendant/respondent:

a)   made good faith and timely efforts to complete the project; and

b)   certifies, with supporting documentation, that at least 90 percent of the amount of money which was required to be spent was expended on the SEP, no stipulated penalty is necessary.

3.   If the SEP is satisfactorily completed, but the defendant/respondent spent less than 90 percent of the amount of money required to be spent for the project, a small stipulated penalty should be required. Generally, a small stipulated penalty is between 10 and 25 percent of the amount by which the settlement penalty was mitigated on account of the SEP.

4.   If the SEP is satisfactorily completed, and the defendant/respondent spent at least 90 percent of the amount of money required to be spent for the project, no stipulated penalty is necessary.

The determinations of whether the SEP has been satisfactorily completed (i.e., pursuant to the terms of the agreement) and whether the defendant/respondent has made a good faith, timely effort to implement the SEP should be reserved to the sole discretion of EPA, especially in administrative actions in which there is often no formal dispute resolution process.

I.   COMMUNITY INPUT

In appropriate cases, EPA should make special efforts to seek input on project proposals from the local community that may have been adversely impacted by the violations.[19] Soliciting community input into the SEP development process can: result in SEPs that better address the needs of the impacted community; promote environmental justice; produce better community understanding of EPA enforcement; and improve relations between the community and the violating facility. Community involvement in SEPs may be most appropriate in cases where the range of possible SEPs is great and/or multiple SEPs may be negotiated.

When soliciting community input, the EPA negotiating team should follow the four guidelines set forth below.

1.   Community input should be sought after EPA knows that the defendant/respondent is interested in doing a SEP and is willing to seek community input, approximately how much money may be available for doing a SEP, and that settlement of the enforcement action is likely. If these conditions are not satisfied, EPA will have very little information to provide communities regarding the scope of possible SEPs.

2.   The EPA negotiating team should use both informal and formal methods to contact the local community. Informal methods may involve telephone calls to local community organizations, local churches, local elected leaders, local chambers of commerce, or other groups. Since EPA may not be able to identify all interested community groups, a public notice in a local newspaper may be appropriate

3.   To ensure that communities have a meaningful opportunity to participate, the EPA negotiating team should provide information to communities about what SEPs are, the opportunities and limits of such projects, the confidential nature of settlement negotiations, and the reasonable possibilities and limitations in the current enforcement action. This can be done by holding a public meeting, usually in the evening, at a local school or facility. The EPA negotiating team may wish to use community outreach experts at EPA or the Department of Justice in conducting this meeting. Sometimes the defendant/respondent may play an active role at this meeting and have its own experts assist in the process.

---

[19] In civil judicial cases, the Department of Justice already seeks public comment on lodged consent decrees through a Federal Register notice. See 28 CFR §50.7. In certain administrative enforcement actions, there are also public notice requirements that are followed before a settlement is finalized. See 40 CFR Part 22.

4.   After the initial public meeting, the extent of community input and participation in the SEP development process will have to be determined. The amount of input and participation is likely to vary with each case. Except in extraordinary circumstances and with agreement of the parties, representatives of community groups will not participate directly in the settlement negotiations. This restriction is necessary because of the confidential nature of settlement negotiations and because there is often no equitable process to determine which community group should directly participate in the negotiations.

J.   EPA PROCEDURES

1.   Approvals

The authority of a government official to approve a SEP is included in the official's authority to settle an enforcement case and thus, subject to the exceptions set forth here, no special approvals are required. The special approvals apply to both administrative and judicial enforcement actions as follows:

a.   Regions in which a SEP is proposed for implementation shall be given the opportunity to review and comment on the proposed SEP.

b.   In all cases in which a project may not fully comply with the provisions of this Policy (e.g., see footnote 1), the SEP must be approved by the EPA Assistant Administrator for Enforcement and Compliance Assurance. If a project does not fully comply with all of the legal guidelines in this Policy, the request for approval must set forth a legal analysis supporting the conclusion that the project is within EPA's legal authority and is not otherwise inconsistent with law.

c.   In all cases in which a SEP would involve activities outside the United States, the SEP must be approved in advance by the Assistant Administrator and, for judicial cases only, the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice.

d.   In all cases in which an environmental compliance promotion project (section D.6) or a project in the "other" category (section D.8) is contemplated, the project must be approved in advance by the appropriate office in OECA, unless otherwise delegated.

2.   Documentation and Confidentiality

In each case in which a SEP is included as part of a settlement, an explanation of the SEP with supporting materials (including the PROJECT model printout, where applicable) must be included as part of the case file. The explanation of the SEP should explain how the five steps set

forth in Section A.3 above have been used to evaluate the project and include a description of the expected benefits associated with the SEP. The explanation must include a description by the enforcement attorney of how nexus and the other legal guidelines are satisfied.

Documentation and explanations of a particular SEP may constitute confidential settlement information that is exempt from disclosure under the Freedom of Information Act, is outside the scope of discovery, and is protected by various privileges, including the attorney-client privilege and the attorney work-product privilege. While individual Agency evaluations of proposed SEPs are confidential, privileged documents, this Policy is a public document and may be released to anyone upon request.

This Policy is primarily for the use of U.S. EPA enforcement personnel in settling cases. EPA reserves the right to change this Policy at any time, without prior notice, or to act at variance to this Policy. This Policy does not create any rights, duties, or obligations, implied or otherwise, in any third parties.